REMARKS

In paragraph 3 of the Office Action, Claims 1-9 and 17 were rejected under 35 U.S.C. § 112 second paragraph as being indefinite. In Claim 1 the portion: "c) directing unmodified liquid from the brine tank to the nanofilter" was objected to as indefinite. Claim 1 has been amended and, as a result of the amendment, the word "unmodified" has been deleted.

Paragraph 5 documented a rejection of Claims 1, 2, 9 and 17 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,666,971 (Chen).

It is respectfully submitted that the object of the present invention, in view of the structure claimed by Claim 1, cannot be accomplished by any of the embodiments illustrated in Chen. All of the illustrated arrangements have a single process loop to accomplish both the softening and nano filtration functions. As shown in FIG. 3(b) of that reference, this loop consists of Secondary Softener 16, Primary Softener 12, Nano filtration 1-2 and Storage 110, a Tank, a Pump, a Fresh Brine tank 54, and Pump 128 which completes the control loop by returning to Secondary Softener 16. All of the embodiments illustrated show both functions running simultaneously under a single control. Such an arrangement is acceptable in Chen because the purpose requires that only the water be softened to a predetermined level while the amount of salt is minimizing only by the length of operating time required to obtain the desired water softness.

In contrast, the present invention provides two separately controlled process loops, with the first process loop having the necessary equipment to operate and control a regenerating function in order to obtain a predetermined softness (see page 4,

lines 9-17, page 5, lines 19-25, and page 8, lines 4-12 of the application), and the second process loop having the necessary equipment to operate and control a nano filtration function (see page 9, lines 12-23 and page 10, lines 1-11 of the application). The control of two processes permits the obtaining of desired output levels for each one. The ability to control the regeneration process separate from controlling the nanofilter function is necessary because here the system must regenerate water to a predetermined level and also lower the amount of hardness ions present in the discharge water to a predetermined level. If only one process loop were provided, obtaining the two required predetermined levels for one process would not result in the required predetermined level because of their different time requirements.

While the functions achieved by the claims have been retained, the claims have been reorganized to more clearly reflect which equipments relate to the first process loop and which relate to the second process loop to more clearly differentiate the present invention from Chen. It is respectfully submitted that the structure of Chen, which provides only one controlled process loop, cannot provide the control of two separate processes required by the present invention.

Paragraph 8 documents the rejection of Claims 3-5 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,666,971 (Chen), as applied to claims 1 and 2, and further in view of U.S. Patent No. 4,275,448 (Le Dall).

It is respectfully submitted that the discussion relating to paragraph 5, wherein claims 1-2, 9 and 17 were rejected under § 102(b), also applies here. Applying the teachings of Le Dall to

Chen will still not provide the necessary structure and functions of the present invention as claimed in claim 1.

In paragraph 9, Claims 6-8 were indicated as being rejected under 35 U.S.C. § 103(a) and unpatentable over United States Patent No. 6,666,971 (Chen), as applied to claims 1 and 2. It is asserted that those claims are patentable on the same basis as is claim 1.

Having responded to all of the objections it is hereby requested that claims 1-7, 9 and 17 be allowed.

Please charge any deficiencies or credit any over payment to Deposit Account 14-0620.

Respectfully submitted,

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By his attorney

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